

54



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,929	04/15/2004	Jae-Hong Park	A33914- B- 067515.0617	7393
21003	7590	03/10/2005	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			APPIAH, CHARLES NANA	
			ART UNIT	PAPER NUMBER
			2686	
DATE MAILED: 03/10/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,929

Applicant(s)

PARK ET AL.

Examiner

Charles Appiah

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 250-303 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 250-258, 262-270, 272-290, 292-297 and 299-303 is/are rejected.
- 7) ☒ Claim(s) 259, 260, 271, 278, 291 and 298 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/564,941.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. Claims 250-303 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-102 of U.S. Patent No. 6,741,868. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broad and are encompassed by the claims of the patent.
2. Claims 250, 264, 272, 284 and 292 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 6,782,274. Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations of the claims of the instant application are broad enough to be encompassed by the claims of the patent.
3. Claims 250-303 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 250-321 of copending Application No. 10/825,281 ('281 application). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the '281 application are broad enough to be encompassed by the claims of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 250-303 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 250-322 of

copending Application No. 10/824,908. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant are broad enough to be encompassed by the limitations the '908 application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 250-254, 256, 257 and 258 are rejected under 35 U.S.C. 102(e) as being anticipated by **Korpela (5,946,634)**.

Regarding claim 250, Korpela discloses a method for interfacing among a terminal (10), a radio network (20a-20c) and a core network (30a-30c), connected to the radio network, wherein the radio network has an asynchronous operating type (digital signal processor of mobile terminal capable of operating in several modes under control of the control device to selectively interconnect and set up either a voice or data (B-ISDN) communication session, see col. 3, line 66 to col. 4, line 3), the method comprising: providing the terminal with a message including a core network operating

type (see Fig. 9, steps 1202-1206), at the terminal, recognizing the operating type of the core network on the basis of a core network operating type information contained in the message, to thereby allow the terminal to operate according to the recognized operating type of the core network (see Fig. 9, steps 1202-1206, col. 6, lines 29-41).

Regarding claim 251, Korpela further discloses storing the recognized operating type of the core network (see col. 6, lines 29-50).

Regarding claim 252, Korpela further discloses receiving the message having the core network operating type information through a predetermined channel (mobile terminal receives broadcast signals as transmitted on the broadcast channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5), extracting the core network operating type information from the received message, and setting an operating type of the terminal to the synchronous operating type or the asynchronous operating type on the basis of the recognized operating type of the core network (see col. 6, lines 30-51).

Regarding claims 253 and 254, Korpela teaches inserting the core network operating type information into a predetermined location of the message of the be transmitted to the terminal and transmitting the message through a predetermined channel (see 102 of Fig. 8) and further disclosing transmitting the message having the core network operating type information through a predetermined channel wherein the channel is a broadcast control channel (mobile terminal receives broadcast signals as transmitted on the broadcast control channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5).

Regarding claims 256, Korpela further discloses wherein the core network operating type information is periodically inserted into the predetermined location of the message to be transmitted to the terminal (see col. 6, lines 15-24).

Regarding claims 257 and 258, Korpela's teaching as illustrated in Figs. 8 and 9 shows the message including a master information block and system information message (see col. 6, lines 14-41, Fig. 8).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 255 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Korpela (5,946,634)**.

Regarding claim 255, Korpela teaches inserting the core network operating type information into a predetermined location of the message of the be transmitted to the terminal and transmitting the message though a predetermined channel (see 102 of Fig. 8) and further disclosing transmitting the message having the core network operating type information through a predetermined channel wherein the channel is a broadcast control channel (mobile terminal receives broadcast signals as transmitted on the broadcast control channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5), but fails to specifically teach wherein the predetermined location is a core network type information field of a synchronous channel message.

However, since Korpela teaches synchronous transmission capability, those of ordinary skill in the art would have appreciated being able to use the synchronous channel to convey information in a message on the core network type in order to ensure the proper protocol adaptation for a desired communication such as voice.

9. Claims 261-270, 272-277, 279, 281-290, 292-297, 299, 301, 302 and 303 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Korpela (5,946,634)** in view of **Lupien et al. (6,389,008)**.

Regarding claim 261, Korpela meets all limitations as applied above to claim 250 but fails to specifically that the core network type information includes an ANSI-41 information representing a synchronous operating type core network.

Lupien discloses an integrated radio communication network, which integrates an ANSI-41 circuit switched network and a GPRS packet data network (see title, abstract), wherein the amount of integration is kept as low as possible by maintaining the integrity of each network function and node on both the GPRS side of the interface and the ANSI-41 side (see col. 4, lines 42-63, col. 16, lines 35-51), and includes an ANSI-41 core network (see col. 12, lines 3-21).

It would therefore have been obvious to one of ordinary skill in the art to implement Korpela's multiple protocol communication system wherein a core network operates according to ANSI-41 protocols in order to allow mobile subscribers to access both voice/circuit switched and packet switched services in a flexible manner as taught by Lupien.

Regarding claims 262 and 263 Korpela further discloses the core network operating type information including GSM-MAP information feature of GSM networks, (GSM evolutionary networks, col. 2, lines 38-40), but fails to specifically teach the GSM-MAP information represents an asynchronous operating type core network and an ANSI-41 information representing a synchronous operating type.

Lupien discloses an integrated radio communication network, which integrates an ANSI-41 circuit-switched network and a GPRS packet data network (see title, abstract), wherein the amount of integration is kept as low as possible by maintaining the integrity of each network function and node on both the GPRS side of the interface and the ANSI-41 side (see col. 4, lines 42-63, col. 16, lines 35-51), and includes an ANSI-41 core network (see col. 12, lines 3-21).

It would therefore have been obvious to one of ordinary skill in the art to implement Korpela's multiple protocol communication system wherein a core network operates according to ANSI-41 and GSM-MAP protocols in order to allow mobile subscribers to access both voice/circuit switched and packet switched services in a flexible manner as taught by Lupien.

Regarding claims 264, 272, 284 and 292, Korpela discloses an apparatus and a method for interfacing among a terminal (10), a radio network (20a-20c) and a core network (30a-30c), connected to the radio network, wherein the terminal has a hybrid operating type (digital signal processor of mobile terminal capable of operating in several modes under control of the control device to selectively interconnect and set up either a voice or data communication session, see col. 3, line 66 to col. 4, line 3) being

possible to be set as either a synchronous operating type (GSM network), or an asynchronous operating type (B-ISDN network), the core network is a GSM-MAP operating type (feature of GSM networks, GSM evolutionary networks, col. 2, lines 38-40), comprising: messaging block for providing the terminal with a master information block including a core network operating type information representing an operating type of the core network (see Figs. 8 and Fig. 9, step 1202, col. 6, lines 29-41), detecting block, contained in the terminal, for recognizing the operating type of the core network on the basis of the core network operating type information contained in the received master information block (see Fig. 9, step 1204, col. 6, lines 29-41), and setting block, contained in the terminal, for setting an operating type of the terminal to one of the synchronous operating type and the asynchronous operating type on the basis of the recognized operating type of the core network. (see Figs. 10 and 12, steps 1212, 1214, 1230, and 1232).

Korpela fails to explicitly teach that the core network is specifically an ANSI-41 operating type.

Lupien discloses an integrated radio communication network, which integrates an ANSI-41 circuit switched network and a GPRS packet data network (see title, abstract), wherein the amount of integration is kept as low as possible by maintaining the integrity of each network function and node on both the GPRS side of the interface and the ANSI-41 side (see col. 4, lines 42-63, col. 16, lines 35-51), and includes an ANSI-41 core network (see col. 12, lines 3-21).

It would therefore have been obvious to one of ordinary skill in the art to implement Korpela's multiple protocol communication system wherein a core network operates according to ANSI-41 protocols in order to allow mobile subscribers to access both voice/circuit switched and packet switched services in a flexible manner as taught by Lupien.

Regarding claims 265, 274, 276 and 294, Korpela further discloses a storage device, contained in the terminal, for storing the recognized operating type of the core network wherein the storage device is a memory for storing the operating type of the core network (feature of step 1222 of Fig. 10).

Regarding claim 266, Korpela further discloses extracting the core network operating type information from the received master information, and setting an operating type of the terminal to one of the synchronous operating type and the asynchronous operating type on the basis of the recognized operating type of the core network (see col. 6, lines 30-51).

Regarding claims 267 and 269, Korpela further discloses inserting the core network operating type into the master information block (see Fig. 8), transmitting the master information block to the terminal through a predetermined channel, wherein the predetermined channel is a broadcast control channel (use of broadcast access channel to transmit signals, including backbone network type code, see col. 6, lines 14-24).

Regarding claims 268, 280, 288 and 300, Korpela teaches inserting the core network operating type information into a predetermined location of the message

be transmitted to the terminal and transmitting the message through a predetermined channel (see 102 of Fig. 8) and further disclosing transmitting the message having the core network operating type information through a predetermined channel wherein the channel is a broadcast control channel (mobile terminal receives broadcast signals as transmitted on the broadcast control channel, col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5), but the combination of Korpela and Lupien fail to specifically teach that the predetermined location is a core network type information field of a synchronous channel message.

However, since Korpela teaches synchronous transmission capability, those of ordinary skill in the art would have appreciated being able to use the synchronous channel to convey information on the core network type in order to ensure the proper protocol adaptation for a desired communication such as voice communication.

Regarding claim 270, Korpela further discloses wherein the core network operating type information is periodically inserted into the master information block to be transmitted to the terminal (see col. 6, lines 15-24).

Regarding claims 273 and 293, Korpela further discloses wherein the detection block includes: receiver block for receiving the master information block having the core network operating type information (see col. 6, lines 14-41 and col. 2, line 66 to col. 3, line 5), extraction block for extracting the core network operating type information from the received master information message (see col. 6, lines 30-51).

Regarding claims 275, 277, 295, 296 and 297, Korpela as modified by Lupien fail to specifically teach that the messaging block includes a dip-switch for designating the operating type of the core network and the memory is a read only memory (ROM).

The use of storage devices including a dip-switch or ROM is very well known in the art and as such examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art to provide a storage or memory device including a dip-switch or ROM in the system of Korpela and Martinez in order to control the executing of codes from the storage locations for effecting desired communications.

Regarding claim 272, Korpela discloses an apparatus for interfacing among a terminal, a radio network and a core network

Regarding claims 279, and 281, Korpela further discloses wherein the messaging block inserts the core network operating type information block into the messaging block (see Fig. 8), and provides the terminal with the master information block through a predetermined channel wherein the predetermined channel is a broadcast control channel (use of broadcast access channel to transmit signals, including backbone network type code, see col. 6, lines 14-24).

Regarding claims 282 and 302, Korpela further discloses wherein the core network operating type information is periodically inserted into the predetermined location of the message to be transmitted to the terminal (see col. 6, lines 15-24).

Regarding claims 283 and 303, the combination of Korpela and Lupien further discloses wherein the radio network includes at least a base transceiver station (BTS)

and a base station controller (BSC) for controlling the BT (see col. 1, lines 19-25, and lines 63-66).

Regarding claim 285, Korpela further discloses storing the recognized operating type of the core network (feature of step 1222 of Fig. 10, col. 6, lines 29-50).

Regarding claim 286, Korpela further discloses extracting the core network operating type information from the received master information, and setting an operating type of the terminal to one of the synchronous operating type and the asynchronous operating type on the basis of the recognized operating type of the core network (see col. 6, lines 30-51).

Regarding claims 287, 289, 299 and 301, Korpela further discloses inserting the core network operating type into the master information block (see Fig. 8), transmitting the master information block to the terminal through a predetermined channel, wherein the predetermined channel is a broadcast control channel (use of broadcast access channel to transmit signals, including backbone network type code, see col. 6, lines 14-24).

Regarding claims 290, Korpela further discloses wherein the core network operating type information is periodically inserted into the predetermined location of the message to be transmitted to the terminal (see col. 6, lines 15-24).

Allowable Subject Matter

10. Claims 259, 260, 271, 278, 291, and 298 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Huusko et al. (6,397,065) discloses a radio access network connected to one or more core networks.

Civanlar et al. (EP 0 841 831) discloses an apparatus for establishing a communication session between first and second terminals in communication over a plurality of networks that employ differing transmission standards.

Lane et al. (GB 2 283 154) discloses a device for selecting a communication network based on a recognized type of data flow.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is 703 305-4772. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2686

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CA


CHARLES APPIAH
PRIMARY EXAMINER